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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/584,060

06/11/2007

Walter Stephan

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EXAMINER

KILIMAN, LESZEK B

ART UNIT

PAPER NUMBER

1787

MAIL DATE

DELIVERY MODE

04/01/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/584,060 | <b>Applicant(s)</b><br>STEPHAN ET AL. |  |
|                              | <b>Examiner</b><br>leszek b. kiliman | <b>Art Unit</b><br>1794               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-11, 14, 15, 17, 18, 20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-11, 14, 15, 17, 18, 20, 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-11,14-15,17-18,20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelso'803 (UK) in view of Sunol'308.

The applied Kelso'803 reference discloses a "full-cell" process of impregnation of wood. See page 1, lines 15-30. In such process pressure is applied to a wood substrate and then impregnation liquid is applied. The disclosed process uses temperature and pressure to force water based wood treatment composition. The Sunol'308 reference teaches that it is known in the art to impregnate wood with polymer using pressure. See column 1, lines 29-58.

It would have been obvious to one of ordinary skill in the art to add a temperature element in the first step of applying pressure in Kelso'803 method since such would improve impregnation process by removing water and other impurities contained in the wood. Also, it would have been obvious to supplement water born composition with liquid resin since Sunol'308 teaches that wood can be impregnated just with polymers or monomers (monomers can be polymerized in

Art Unit: 1794

wood by application of radiation) and such would improve efficiency of the impregnation and increased amount of resin in the wood.

It would have been obvious to vary temperature, pressure and time of the process since such would optimize properties of the final wood product.

Applicants have argued that the applied Kelso'803 reference does not teach or suggest the claimed invention. The examiner respectfully disagree. The teachings of the prior art do not need to disclose all details of the claimed invention. The examiner submits that Kelso'803 discloses essential elements of the claimed invention. First, pressure is applied to a wood substrate and wood is impregnated. Second, Kelso'803 teaches use of temperature. The examiner submits that it would have been obvious to one having ordinary skill in the art at the time of the invention to optimize conditions of the process and that includes optimizing pressure, temperature, timing and composition. Applying temperature to a different stages of the process is commonly practiced in the art. Furthermore, impregnation of wood with liquid resin instead of water based solution would have been obvious to one having ordinary in view of the teachings disclosed in Sunol'308.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to leszek b. kiliman whose telephone number is 571-272-1509. The examiner can normally be reached on M-T, 6.30-5.00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, calie shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lk  
/leszek b kiliman/  
Primary Examiner, Art Unit 1794